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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,941	12/30/2003	Michael Shoen Davis	131713-1	1911
23413	7590	07/12/2006	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			CHEN, VIVIAN	
			ART UNIT	PAPER NUMBER

1773

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/748,941

Applicant(s)

DAVIS ET AL.

Examiner

Vivian Chen

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-46 is/are pending in the application.
4a) Of the above claim(s) 7,13 and 40-46 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,3-6,8-12,14-31 and 36-39 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/3/2006.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

1. Claim 2 has been cancelled by Applicant.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 is vague and indefinite because the language "further comprises" strongly and confusingly implies that the additionally recited component (SAN) is either an additional component of the recited ASA copolymer or a mixture or blend of ASA and SAN.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1, 3-6, 8-12, 14-16, 22-29, 36-39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over:

(a) claims 1-47 of copending Application No. 10/210,746 (US 2003/0175488); or

(b) claims 1-39 of copending Application No. 10/894,952 (US 2006/0019099);

in view of IDEL ET AL (US 4,381,359).

The copending references claim multilayer laminates comprising a resorcinol arylate polyester-carbonate copolymer surface layer, at least one intermediate layer, and an inner layer comprising a blend of polycarbonate and acrylonitrile-styrene-acrylate graft copolymer (ASA), wherein the laminate is optionally further applied to a thermoplastic or thermoset substrate layer, and other recited features. Features not specifically recited are obvious and/or well known in the art.

IDEL ET AL disclose that it is well known in the art to incorporate 10-90 parts by weight (pbw) of a composition containing 25-100 pbw acrylonitrile-styrene-acrylate graft copolymer (ASA) and up to 75 pbw of an additional acrylonitrile-styrene copolymer with 10-90 pbw polycarbonate in order to obtain with reduced defects. (line 40-63, col. 1; line 58, col. 5 to line 7, col. 6; line 32-44, col. 6; line 5-20, col. 7)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize known PC/ASA-based blend compositions in the laminates claimed in the copending applications in order to obtain durable, attractive laminates which can further be used as cladding or surface layers for other substrate materials. It would have been

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obvious to use commercially available stabilizers (claims 11-12) in order to improve the durability and environmental resistance of the underlying PC/ASA layer. One of ordinary skill in the art would have selected the melt flow properties of the inner layer (claim 14) in order to optimize compatibility in melt processing and multilayer film forming operations. Regarding claims 22, 24-27, the method of forming is a product-by-process limitation and is not further limiting in as so far as the structure of the product is concerned. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. ***The patentability of a product does not depend on its method of production.*** If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." [emphasis added] *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113. Once a product appearing substantially identical is found, the burden shifts to applicant to show a ***unobvious*** difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1993).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1, 3-6, 8-12, 14-16, 19, 22-27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over:

(a) claims 1-37 of copending Application No. 10895,522 (US 2006/0017193);
in view of IDEL ET AL (US 4,381,359).

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The copending references claim multilayer laminates comprising a resorcinol arylate polyester-carbonate copolymer surface layer, at least one intermediate layer, and an inner layer comprising a blend of polycarbonate and acrylonitrile-styrene-acrylate graft copolymer (ASA), and other recited features. Features not specifically recited are obvious and/or well known in the art.

IDEL ET AL disclose that it is well known in the art to incorporate 10-90 parts by weight (pbw) of a composition containing 25-100 pbw acrylonitrile-styrene-acrylate graft copolymer (ASA) and up to 75 pbw of an additional acrylonitrile-styrene copolymer with 10-90 pbw polycarbonate in order to obtain with reduced defects. (line 40-63, col. 1; line 58, col. 5 to line 7, col. 6; line 32-44, col. 6; line 5-20, col. 7)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize known PC/ASA-based blend compositions in the laminates claimed in the copending applications in order to obtain durable, attractive laminates. It would have been obvious to use commercially available stabilizers (claims 11-12) in order to improve the durability and environmental resistance of the underlying PC/ASA layer. One of ordinary skill in the art would have selected the melt flow properties of the inner layer (claim 14) in order to optimize compatibility in melt processing and multilayer film forming operations.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

6. Claims 1, 3-6, 8, 11-12, 14-31, 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over:

BRUNELLE ET AL (US 6,306,507) or BRUNELLE ET AL (US 6,265,522);

in view of IDEL ET AL (US 4,381,359).

BRUNELLE ET AL references disclose multilayer laminates comprising a resorcinol arylate polyester-carbonate copolymer surface layer having a typical thickness of 2-2500 microns, at least one intermediate layer (e.g., polycarbonate, polymethylmethacrylate (PMMA), and blends thereof), and an inner layer comprising a polycarbonate, acrylonitrile-styrene-acrylate graft copolymer (ASA), polymethyl methacrylate (PMMA), and blends thereof, wherein the laminate is optionally further applied to a thermoplastic or thermoset substrate layer. The laminate is formed by a variety of conventional methods such as coextrusion, and is suitable for automotive components and panels, as well as for forming coated foamed articles.

IDEL ET AL disclose that it is well known in the art to incorporate 10-90 parts by weight (pbw) of a composition containing 25-100 pbw acrylonitrile-styrene-acrylate graft copolymer (ASA) and up to 75 pbw of an additional acrylonitrile-styrene copolymer with 10-90 pbw polycarbonate in order to obtain with reduced defects. (line 40-63, col. 1; line 58, col. 5 to line 7, col. 6; line 32-44, col. 6; line 5-20, col. 7)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize known PC/ASA-based blend compositions in the laminates of the BRUNELLE references in order to obtain durable, attractive laminates which can further be used as cladding or surface layers for other substrate materials. It would have been obvious to use

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commercially available stabilizers (claims 11-12) in order to improve the durability and environmental resistance of the underlying PC/ASA layer. One of ordinary skill in the art would have selected the melt flow properties of the inner layer (claim 14) in order to optimize compatibility in melt processing and multilayer film forming operations. It would have been obvious to incorporate additional intermediate layers (claim 18) in order to enhance adhesion and/or to obtain specific color or visual effects. One of ordinary skill in the art would have used conventional foam-forming materials such as polyurethane (claim 31) as a substrate in order to obtain useful coated foam articles. Regarding claims 22, 24-27, the method of forming is a product-by-process limitation and is not further limiting in as so far as the structure of the product is concerned. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. *The patentability of a product does not depend on its method of production.* If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." [emphasis added] *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113. Once a product appearing substantially identical is found, the burden shifts to applicant to show a *unobvious* difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1993).

Response to Arguments

1. Applicant's arguments filed 4/26/2006 have been fully considered but they are not persuasive.

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(A) Applicant argues that the outstanding obviousness-type double patenting rejections should be withdrawn since none of the cited copending Applications nor the present Application has been patented. However, as noted above, the double patenting rejections are clearly stated as being provisional. Such provisional double patenting rejections are permissible even when none of the involved Applications have yet been patented. See MPEP 804(I)(B).

(B) Applicant argues that claim 6 is not vague and indefinite because the claim merely further describes and defines the ASA copolymer as an SAN copolymer. However, the use of the phrase “further comprise” conflicts with this interpretation because the term “further comprises” strongly implies that the recited SAN is present *in addition to* the previously mentioned ASA copolymer, either as an additional component of the recited ASA copolymer itself (i.e., an SAN block or units incorporated within the ASA copolymer) or an additional component in a mixture or blend (i.e., a blend/mixture of ASA and SAN copolymers). If Applicant wishes to further describe and define the ASA copolymer as a SAN copolymer, Applicant should use language such as “comprises” (without the confusing term “further”) or “is”.

(C) Applicant argues that there is no motivation to combine IDEL ET AL with the BRUNELLE references because IDEL ET AL is directed to molding compositions. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed.

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Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). As an initial matter, IDEL ET AL may be deemed as merely cumulative with respect to the majority of the claims, since they merely require the presence of a polycarbonate and ASA blend, which is fully disclosed in the primary reference, and in regard to those claims, IDEL ET AL merely provides supplemental evidence that polycarbonate/ASA blends are known to have desirable characteristics. In regard to claims 3-4, 6, 9-10 does IDEL ET AL provide a specific teaching of an additional feature not disclosed or suggested in the primary claim (i.e., the presence of SAN). Although IDEL ET AL discusses that the disclosed material is suitable for use in injection molding, that does not preclude said blend compositions from being formed by other thermoplastic shaping methods into a variety of conventional forms, especially since the reference even mentions using the disclosed composition in the form of foils (i.e., films or sheets) (line 19, col. 7). Therefore, one of ordinary skill in the art would reasonably believe that the blends disclosed in IDEL ET AL which have a desirable visual appearance and stability would be useful and suitable for use in laminates such as those disclosed in BRUNELLE ET AL. Applicant has not provided any probative evidence to the contrary, nor has Applicant provided any evidence of criticality or unexpected results.

(C) In response to applicant's argument that there is no expectation that the composition of IDEL ET AL has good adhesion in a multilayer laminate, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Furthermore, BRUNELLE ET AL specifically discloses PC/ASA blends as being a suitable component layer

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in resorcinol polyarylate-based laminates, which would imply that there are no gross adhesion problems. Applicant has provided no probative evidence to the contrary.

(D) Applicant argues that there is no motivation for selecting the recited melt flow index, stabilizers, or polyurethane foam substrates. With respect to the melt flow index, this is a parameter which may be readily selected by one of ordinary skill in the art depending on various known considerations, such as the type of forming method and equipment used, the desired mechanical properties of the resultant produce, etc. Applicant has not provide any probative evidence of criticality or unexpected results from the recited melt flow values. With respect to the use and type of stabilizers, it is well known in the art to incorporate performance enhancing additives to improve various physical properties (e.g., stabilizers to improve weatherability, etc.). One of ordinary skill in the art is readily capable of ascertaining a suitable (i.e., compatible and effective) type of such known additives for a given class of resin composition to achieve the desired enhancement. Similarly, one of ordinary skill in the art would obviously avoid additives which are incompatible or are grossly detrimental to the function of the material or laminate. Applicant has not provided any probative evidence of criticality from the recited stabilizer. With respect to the polyurethane foam substrates, the BRUNELLE ET AL clearly discloses further applying the disclosed laminate to a foam layer to form a coated form article and polyurethane is a well known, economical, and commonly used foam material. It would be obvious to one of ordinary skill in the art to use a conventional foam material such as a polyurethane as a further substrate layer, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

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(E) Applicant argues that the prior art fails to disclose the subject matter of claims 22, 24-27. However, regarding claims 22, 24-27, the method of forming is a product-by-process limitation and is not further limiting in as so far as the structure of the product is concerned. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. *The patentability of a product does not depend on its method of production.* If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." [emphasis added] *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113. Once a product appearing substantially identical is found, the burden shifts to applicant to show a *unobvious* difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1993). Applicant has not provide any probative evidence of such an difference.

Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

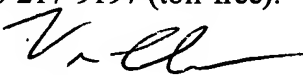
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 7, 2006


Vivian Chen
Primary Examiner
Art Unit 1773